Catalogue of American Amphibians and Reptiles.

ROSSMAN, DOUGLAS A. 1970. *Thamnophis proximus.*

Thamnophis proximus (Say)
Western ribbon Snake

Coluber proximus Say, 1823:339. Type-locality, "Stone quarry on west side of Missouri River, 3 miles above the mouth of Boyers River." Restated as "approximately 3 miles ENE Fort Calhoun, Washington County, Nebraska" by Rossman (1963:109). According to Smith and Taylor (1945:166), the holotype is lost. It probably was deposited in the Acad. Nat. Sci. Philadelphia, although this is not a certainty (H. M. Smith, personal communication).

Tropidonotus proximus: Boie, 1827:535.

Eutainia Faireyi Baird and Girard, 1853:25. Type-locality, "Prairie Mer Rouge, La." Restated as "Prairie Mer Rouge, Morehouse Parish, Louisiana" by Schmidt (1953:173). Holotype, U. S. Natl. Mus. 752, adult female collected by Jas. Fairie (examined by author). Cochran (1961:181) stated that this specimen is a "cotype," the other specimens having been deposited in the Mus. Comp. Zool. and Univ. Michigan Mus. Zool.

Eutainia proxima: Baird and Girard, 1853:25.

Eutaenia proxima: Baird, 1859:16.

Eutaenia faireyi: Cooper, 1860:299.

Eutaenia rutiloris Cope, 1885:338. Type-locality, "Cozumel Island, Yucatán [now Quintana Roo], Mexico," according to Cochran (1961:183). Holotype, U. S. Natl. Mus. 13906, adult female collected by party from U. S. Fish Commission *Albatross,* 23–29 January 1885 (examined by author).

Thamnophis proxima: S. Garman, 1892:105.

Thamnophis proximus: Strecker, 1909:8.

• CONTENT. Six subspecies are recognized: *proximus, orarius, rubrilineatus, diabolicus, rutiloris,* and *alpinus.*

• DEFINITION. A large, long-tailed member of the genus *Thamnophis* characterized by: 19–19–17 dorsal scale rows; a single preocular; typically 8 supralabials, the 4th and 5th entering the orbit; 141 to 181 ventrals; 82 to 131 subcaudals; lateral stripe on dorsal scale rows 3 and 4, at least anteriorly; labials and ventrals without black markings; dark ventrolateral stripe absent or narrow in most populations; parietal spots fused, brightly colored, and usually large; hemipenis short, usually extending to the seventh or eighth subcaudal when inverted; teeth numerous, averaging about 30 to each maxilla, 34 to each dentary, 20 to each palatine, and 33 to each pterygoid.

• DESCRIPTIONS. Rossman (1963) provided detailed descriptions of external morphology, color pattern, proportions, dentition, and hemipenes, including the individual, geographic, sexual, and ontogenetic variation of each, where applicable. He also furnished descriptions of all six subspecies.

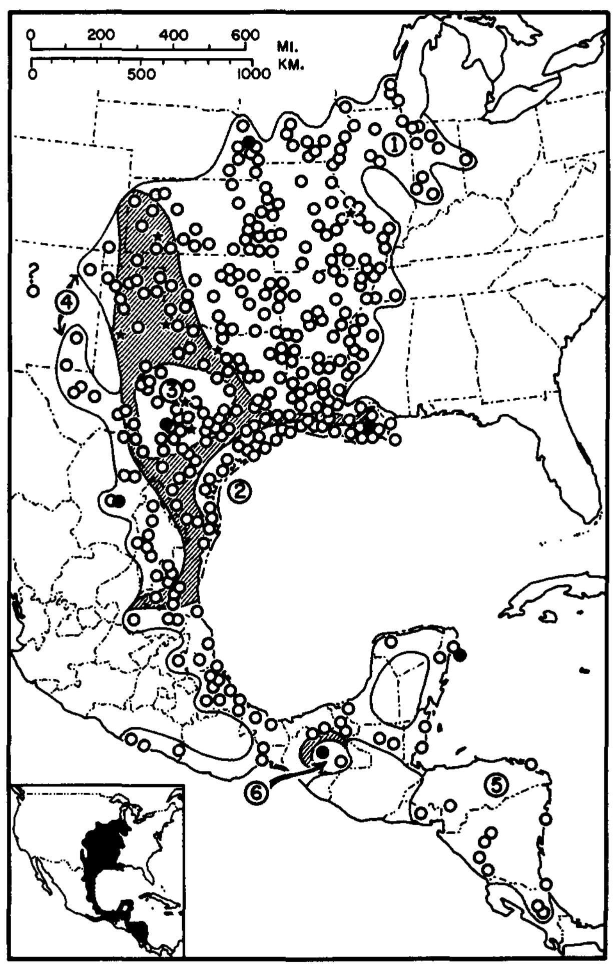
• ILLUSTRATIONS. Drawings of the head appear in Schmidt and Davis (1941) and Rossman (1963). Colored illustrations of *T. p. rubrilineatus* (Conant, 1958) and *T. p. diabolicus* (Stebbins, 1966) have been published, as well as photographs of *T. p. rubrilineatus* (Gloyd, 1935), *T. p. diabolicus* (Wright and Wright, 1957), and *T. p. proximus* (Smith, 1961; Anderson, 1965).

• DISTRIBUTION. From southern Wisconsin, Indiana, and the Mississippi Valley westward through the Great Plains to southeastern Colorado and eastern New Mexico, and southward through eastern Mexico to central Costa Rica. It occurs on the Pacific coast of Mexico from the vicinity of Acapulco, Guerrero, to the Isthmus of Tehuantepec in Oaxaca (Liner and Dundee, 1969).

• FOSSIL RECORD. Holman has reported this species from the Pleistocene of Foard Co., Texas (1962), Denton Co., Texas (1963), Llano Co., Texas (1966), Lubbock Co., Texas (1969), and St. Louis, Missouri (1965). There also are Pleistocene records from Kendall Co., Texas (Hill, 1966), and Meade Co., Kansas (Brattstrom, 1967). The latter is cited as *Thamnophis* sp., near *sauritus,* but geographic considerations suggest *proximus.* Holman's use of *sauritus* in his earlier papers (1962, 1963) reflected the nomenclature then current. Rossman (1962) demonstrated that *proximus* is a valid species, rather than a geographic race of *T. sauritus.*

• PERTINENT LITERATURE. The most recent taxonomic revision was that by Rossman (1963), who also reviewed habitat and food preferences, reproduction, and parasites. Cope (1892), Brown (1904), and Ruthven (1908) provided diagrams of possible phylogenetic position. Fouquette (1954) has examined food preferences in some detail, and Tinkle (1957) has given the most comprehensive account of general ecology and reproduction.

• ETYMOLOGY. The specific name *proximus* is Latin, meaning nearest or next. The subspecific names are derived as follows: *orarius,* from the Latin *orarius,* of the coast; *rubrilineatus,* from the Latin *ruber,* red, and the Latin *lineatus,* marked with lines; *diabolicus,* from the Greek *diabolikos,* devilish, an allusion to the forked pattern of the parietal spots and to the aridity of the region inhabited by



MAP. The solid circles mark type localities; open circles indicate other records. Stars indicate fossil records. Areas of intergradation are shaded.

this race; *rutiloris* from the Latin *rutilo*, to be red, and the Latin *oris*, of the mouth; *alpinus*, from the Latin *alpinus*, of the Alps.

1. *Thamnophis proximus proximus* (Say)

Coluber proximus Say. See species account.
Eutainia Faireyi Baird & Girard. See species account.
Tropidonotus saurita var. *Faireyi:* Duméril, Bibron & Duméril, 1854:585. [by implication]
Tropidonotus saurita var. *proxima:* Jan, 1863:70.
Eutainia saurita var. *faireyi:* H. Garman, 1892:264.
Eutainia saurita var. *proxima:* H. Garman, 1892:264.
Thamnophis saurita var. *proxima:* Duméril & Bocourt, 1893: 757.
Thamnophis saurita var. *faireyi:* Duméril & Bocourt, 1893:758.
Thamnophis sauritus proximus: Ruthven, 1908:98.
Thamnophis proxima faireyi: Hurter, 1911:159.
Thamnophis sirtalis proximus: Klauber, 1948:9. (See Remarks in *T. sauritus* account)
Thamnophis proximus proximus: Rossman, 1963:131.

• Definition. A subspecies of *Thamnophis proximus* characterized by a black dorsum, a narrow orange vertebral stripe, and a lack of a dark ventrolateral stripe.

2. *Thamnophis proximus orarius* Rossman

Thamnophis proximus orarius Rossman, 1963:132. Type-locality, "Waggaman, Jefferson Parish, Louisiana." Holotype, Tulane Univ. 11764, adult female collected by Horace Whitten on 28 February 1950.

• Definition. A subspecies of *Thamnophis proximus* characterized by an olive-brown dorsum, a broad gold vertebral stripe, and lack of a dark ventrolateral stripe.

3. *Thamnophis proximus rubrilineatus* Rossman

Thamnophis proximus rubrilineatus Rossman, 1963:134. Type-locality, "State Fish Hatchery, 8.2 miles NW Ingram, Kerr County, Texas." Holotype, Univ. Florida 12188.3, adult male collected by M. J. Fouquette, Jr., and D. A. Rossman on 26 June 1960.

• Definition. A subspecies of *Thamnophis proximus* characterized by an olive-brown to olive-gray dorsum, a bright red vertebral stripe, and a narrow dark ventrolateral stripe or none at all.

4. *Thamnophis proximus diabolicus* Rossman

Thamnophis proximus diabolicus Rossman, 1963:135. Type-locality, "Rio Nadadores, 8 miles W Nadadores, Coahuila, Mexico." Holotype, Univ. Florida 12210, adult female collected by Roger Conant on 26 June 1960.

• Definition. A subspecies of *Thamnophis proximus* characterized by an olive-gray to olive-brown dorsum, an orange vertebral stripe, a narrow dark ventrolateral stripe, and frequent reduction in the width of the lateral stripe on the posterior portion of the body in the southern part of the range.

5. *Thamnophis proximus rutiloris* (Cope)

Eutaenia rutiloris Cope. See species account.
Thamnophis sauritus rutiloris: Smith, 1938:5.
Thamnophis sauritus chalceus: Dunn, 1940:192.
Thamnophis sirtalis chalceus: Klauber, 1948:9. (See Remarks in *T. sauritus* account)
Thamnophis proximus rutiloris: Rossman, 1963:138.

• Definition. A subspecies of *Thamnophis proximus* characterized by an olive-brown dorsum, a broad grayish-tan vertebral stripe, yellow-orange labials, a narrow lateral stripe, and a moderately narrow ventrolateral stripe.

6. *Thamnophis proximus alpinus* Rossman

Thamnophis proximus alpinus Rossman, 1963:140. Type-locality, "San Cristobal Las Casas, Chiapas, Mexico." Holotype, Univ. Florida 12216, adult male collected by M. J. Fouquette, Jr., and D. A. Rossman on 1 August 1960.

• Definition. A subspecies of *Thamnophis proximus* characterized by a dark brown dorsum, a gold vertebral stripe, yellow-orange labials, a narrow lateral stripe, chevron-shaped parietal spots, a broad ventrolateral stripe, and a relatively short tail.

Comment

The zones of intergradation between the various subspecies require precise definition. Fresh specimens from the lower Rio Grande valley suggest that the South Texas—Tamaulipas population is more closely related to *T. p. diabolicus* than to *T. p. orarius*. The ecological relationships of *T. proximus* and *T. sauritus* where their ranges are contiguous or overlap warrant careful investigation.

Literature Cited

Anderson, Paul. 1965. The reptiles of Missouri. Univ. Missouri Press, Columbia. xxiii + 330 p.
Baird, Spencer F. 1859. Reptiles of the boundary. United States and Mexican Boundary Survey, Washington. 35 p.
—, and Charles Girard. 1853. Catalogue of North American reptiles in the Museum of the Smithsonian Institution, part I. Serpents. Smithsonian Misc. Coll. 2(5):1–172.
Boie, Friedrich. 1827. Bemerkungen über Merrem's Versuch eines Systems der Amphibien. Isis 20:508–566.
Brattstrom, Bayard H. 1967. A succession of Pliocene and Pleistocene snake faunas from the high plains of the United States. Copeia 1967(1):188–202.
Brown, Arthur E. 1904. Post-glacial Nearctic centres of dispersal for reptiles. Proc. Acad. Nat. Sci. Philadelphia 56:464–474.
Cochran, Doris M. 1961. Type specimens of reptiles and amphibians in the United States National Museum. U. S. Natl. Mus. Bull. (220):1–291.
Conant, Roger. 1958. A field guide to reptiles and amphibians of the United States east of the 100th meridian. Houghton Mifflin Co., Boston. xv + 366 p., 40 pl.
Cooper, J. G. 1860. Reports of explorations and surveys to ascertain the most practicable and economical route for a railroad from the Mississippi River to the Pacific Ocean. U. S. Senate Rept. 12(4):292–306.
Cope, Edward D. 1885. A contribution to the herpetology of Mexico. Proc. Amer. Philos. Soc. 22:379–404.
— 1892. A critical review of the characters and variations of the snakes of North America. Proc. U. S. Natl. Mus. 14:589–694.
Duméril, André-M.-C., G. Bibron, and Auguste H. A. Duméril. 1854. Erpétologie générale ou histoire naturelle des reptiles. Librairie Encyclopédique de Roret, Paris. Vol. 7, pt. 1:1–780.
Duméril, Auguste H. A., and M.-Firmin Bocourt. 1893. Recherches zoologiques pour servir à l'histoire de la faune de l'Amérique. Mission scientifique au Mexique et dans l'Amérique Centrale, pt. 3, sect. 1:1–1012.
Dunn, Emmett R. 1940. Notes on some American lizards and snakes in the Museum of Goteborg. Herpetologica 1:189–194.
Fouquette, M. J., Jr. 1954. Food competition among four sympatric species of garter snakes, genus *Thamnophis*. Texas J. Sci. 6:172–188.
Garman, Harrison. 1892. A synopsis of the reptiles and amphibians of Illinois. Bull. Illinois State Lab. Nat. Hist. 3:215–388.
Garman, Samuel. 1892. On Texan reptiles. Bull. Essex Inst. 24:98–109.
Gloyd, Howard K. 1935. Some aberrant color patterns in snakes. Papers Michigan Acad. Sci., Arts, Letters 20:661–668.

Hill, W. H. 1966. Pleistocene snakes from a cave in Kendall County, Texas. Master's Thesis, Illinois State Univ. Library. [Not seen]

Holman, J. Alan. 1962. A Texas Pleistocene herpetofauna. Copeia 1962:255–261.

— 1963. Late Pleistocene amphibians and reptiles of the Clear Creek and Ben Franklin local faunas of Texas. J. Grad. Res. Center, So. Methodist Univ. 31:152–167.

— 1964. Pleistocene amphibians and reptiles from Texas. Herpetologica 20:73–83.

— 1965. A Late Pleistocene herpetofauna from Missouri. Trans. Illinois Acad. Sci. 58:190–194.

— 1966. The Pleistocene herpetofauna of Miller's Cave, Texas. Texas J. Sci. 28:372–377.

— 1969. Herpetofauna of the Pleistocene Slaton local fauna of Texas. Southwest. Nat. 14(2):203–212.

Hurter, Julius. 1911. Herpetology of Missouri. Trans. St. Louis Acad. Sci. 20:59–274.

Jan, Georges. 1863. Elenco sistematico degli ofidi descritti e desegnati per l'iconografia generale. Milan. 143 p.

Klauber, Laurence M. 1948. Some misapplications of the Linnaean names applied to American snakes. Copeia 1948(1):1–14.

Liner, Ernest A., and Harold A. Dundee. 1969. Notes on reptiles and amphibians from southern Guerrero and Oaxaca, Mexico. Southwest. Nat. 14(1):129–134.

Rossman, Douglas A. 1962. *Thamnophis proximus* (Say), a valid species of garter snake. Copeia 1962(4):741–748.

— 1963. The colubrid snake genus *Thamnophis*: a revision of the Sauritus group. Bull. Florida State Mus. 7:99–178.

Ruthven, Alexander G. 1908. Variation and genetic relationships of the garter-snakes. U. S. Natl. Mus. Bull. (61):1–201.

Say, Thomas. 1823. *In* Edwin James, Account of an expedition from Pittsburgh to the Rocky Mountains, performed in the years 1819, 1820. Vol. I. Longman, Hurst, Rees, Ovme, and Brown, London. 344 p.

Schmidt, Karl P. 1953. A check list of North American amphibians and reptiles. 6th ed. Publ. Amer. Soc. Ichthyologists and Herpetologists. viii + 280 p.

—, and Dwight D. Davis. 1941. Field book of snakes of the United States and Canada. G. P. Putnam's Sons, New York. xiii + 365 p., 34 pl.

Smith, Hobart M. 1938. Notes on reptiles and amphibians from Yucatan and Campeche, Mexico. Occ. Papers Mus. Zool. Univ. Michigan (388):1–22.

—, and Edward H. Taylor. 1945. An annotated checklist and key to the snakes of Mexico. U. S. Natl. Mus. Bull. (187): 1–239.

Smith, Philip W. 1961. The amphibians and reptiles of Illinois. Illinois Nat. Hist. Surv. Bull. 28, art. 1:1–298.

Stebbins, Robert C. 1966. A field guide to western reptiles and amphibians. Houghton Mifflin Co., Boston. xiv + 279 p., 39 pl.

Strecker, John K., Jr. 1909. Notes on the herpetology of Burnet County, Texas. Baylor Univ. Bull. 12:1–9.

Tinkle, Donald W. 1957. Ecology, maturation and reproduction of *Thamnophis sauritus proximus*. Ecology 38:69–77.

Wright, Albert H., and Anna A. Wright. 1957. Handbook of snakes of the United States and Canada. 2:565–1105. Comstock Publ. Assoc., Ithaca, New York.

D. A. Rossman, Louisiana State University, Baton Rouge, Louisiana 70803.

Published 11 September 1970 by the American Society of Ichthyologists and Herpetologists. Publication is supported by National Science Foundation grant G24231.

Primary editor for this account, Herndon G. Dowling.